**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1 (Currently Amended). Apparatus for measuring a plurality of optically detectable beads, ~~such as polymer beads,~~ said apparatus comprising

a) a vacuum container comprising at least one planar capture body capable of rotating around a central axis,

wherein said capture body comprises a plurality of through-going inlets,

wherein the diameter of each inlet is smaller than the average diameter of the beads to be measured and/or analysed and/or sorted,

b) a pressure controlling device capable of controlling the pressure in the vacuum container, and

c) a device for rotating the vacuum container around the axis of the capture ~~disc~~ [[.]] <u>body</u>

d) a device for measuring at least one property of at least one bead

<u>the apparatus further comprising a capture body support supporting the capture bocy at a distal end and being connected at a proximal end to a hollow shaft, wherein the hollow shaft is fitted with a shaft opening so that a vacuum can be applied to the interior of the vacuum container, and</u>

<u>a vacuum container housing comprising an outer cylinder comprising an opening for connecting the shaft hole with the pressure controlling device, and a guiding plate comprising at least one opening allowing the through-going inlets to be</u>

accessible to beads to be loaded onto the capture body, said guiding plate being attached to the top part of the outer cylinder, thereby defining in the space between the guiding plate and the capture body a guiding channel for harbouring beads, said guiding plate confining the vacuum container to the interior of the vacuum container housing.

2 (Previously Presented). The apparatus according to claim 1 wherein the ratio R between a) the average diameter of the beads being manipulated, and b) the diameter of the through-going inlets, R=a/b, is more than 2.

3 (Previously Presented). The apparatus according to claim 1, wherein the capture body is a planar disc.

4 (Previously Presented). The apparatus according to claim 1, wherein the distance between the axis of rotation of the capture body and each of the through-going inlets of the capture body is the same for each of the through-going inlets of the capture body.

5 (Previously Presented). The apparatus according to claim 4, wherein the distance between neighbouring through-going inlets is the same for all pairs of neighbouring through-going inlets.

6-7 (Cancelled).

8 (Currently Amended). The apparatus according to claim 1, wherein the vacuum container is connected to a device for rotating the vacuum container, ~~such as a stepper motor,~~ operably linked to a momentum transfer split for transferring

the momentum from the stepper motor to the vacuum container thereby causing the vacuum container to rotate in a controlled step-wise fashion.

9-21 (Cancelled).

22 (Previously Presented). The apparatus according to claim 1 further comprising an analysing device for analysing results being generated from the measurement of the at least one property of the at least one bead, wherein said analysis enables individual beads to be characterised and/or identified and optionally also sorted.

23-24 (Cancelled).

25 (Previously Presented). The apparatus according to claim 22 further comprising at least one device for sorting a plurality of beads on the basis of the result generated by the analysing device.

26-30 (Cancelled).

31 (Previously Presented). The apparatus according to claim 1 further comprising a treating device for treating at least one bead optionally having been subjected to measuring or analysing.

32-48 (Cancelled).

49 (Currently Amended). A method for measuring at least one property of at least one bead of a plurality of beads, ~~such as polymer beads,~~ said method comprising the steps of

i) providing a plurality of beads each comprising at least one label,

ii) providing an apparatus for measuring at least one property of at least one bead according to claim 1,

iii) contacting at least one bead of the plurality of beads provided in step i) with the vacuum container capture body of the apparatus provided in step ii),

iv) rotating the capture body to transfer at least one bead from the loading section of the vacuum container to the measuring section of the vacuum container, and

v) using the measuring device of the apparatus for measuring at least one property of at least one bead.

50 (Currently Amended). A method for analysing data generated by measuring at least one property of at least one bead of a plurality of beads, ~~such as polymer beads,~~ said method comprising the steps of

i) providing a plurality of beads each comprising at least one label,

ii) providing an apparatus for analysing at least one property of at least one bead according to claim 22,

iii) contacting at least one bead of the plurality of beads provided in step i) with the vacuum container capture body of the apparatus provided in step ii),

iv) rotating the capture body to transfer at least one bead from the loading section of the vacuum container to the measuring section of the vacuum container,

v) using the measuring device of the apparatus for measuring at least one property of at least one bead, and

vi) analysing data generated by the measuring device for measuring at least one property of at least one bead.

51 (Currently Amended). A method for identifying at least one bead of a plurality of beads, ~~such as polymer beads,~~ said method comprising the steps of

i) providing a plurality of beads each comprising at least one label,

ii) providing an apparatus for analysing at least one property of at least one bead according to claim 22,

iii) contacting at least one bead of the plurality of beads provided in step i) with the vacuum container capture body of the apparatus provided in step ii),

iv) rotating the capture body to transfer at least one bead from the loading section of the vacuum container to the measuring section of the vacuum container,

v) using the measuring device of the apparatus for measuring at least one property of at least one bead, and

vi) using the analysing device for analysing data generated by the measuring device for measuring at least one property of at least one bead, and

vii) identifying at least one bead of a plurality of beads by analysing the data generated by the measuring device for measuring at least one property of at least one bead.

52 (Currently Amended). A method for sorting at least one bead of a plurality of beads, ~~such as polymer beads,~~ said method comprising the steps of

i) providing a plurality of beads each comprising at least one label,

ii) providing an apparatus for sorting at least one bead according to claim 25,

iii) contacting at least one bead of the plurality of beads provided in step i) with the vacuum container capture body of the apparatus provided in step ii),

iv) rotating the capture body to transfer at least one bead
from the loading section of the vacuum container to the
measuring section of the vacuum container,

v) using the measuring device of the apparatus for measuring
at least one property of at least one bead,

vi) using the analysing device for analysing data generated by
the measuring device for measuring at least one property of at
least one bead, and

vii) sorting the at least one bead of a plurality of beads
based on the result of the analysis performed in step vi).


53 (Currently Amended). A method for sorting at least one bead
of a plurality of beads, ~~such as polymer beads,~~ said method
comprising the steps of

i) providing a plurality of beads each comprising at least one
label,

ii) providing an apparatus for sorting at least one bead
according to claim 25,

iii) contacting at least one bead of the plurality of beads
provided in step i) with the vacuum container capture body of
the apparatus provided in step ii),

iv) rotating the capture body to transfer at least one bead
from the loading section of the vacuum container to the
measuring section of the vacuum container,

v) using the measuring device of the apparatus for measuring
at least one property of at least one bead, and

vi) using the analysing device for analysing data generated by
the measuring device for measuring at least one property of at
least one bead,

vii) identifying at least one bead of a plurality of beads by
analysing the data generated by the measuring device for
measuring at least one property of at least one bead, and

viii) sorting the at least one bead of a plurality of beads based on the identification performed in step vii).

54 (Currently Amended). A method for treating at least one bead of a plurality of beads, ~~such as polymer beads,~~ said method comprising the steps of

i) providing a plurality of beads each comprising at least one label,

ii) providing an apparatus for treating at least one bead according to ~~claims~~ 31,

iii) contacting at least one bead of the plurality of beads provided in step i) with the vacuum container capture body of the apparatus provided in step ii),

iv) rotating the capture body to transfer at least one bead from the loading section of the vacuum container to the measuring section of the vacuum container,

v) using the measuring device of the apparatus for measuring at least one property of at least one bead,

vi) analysing data generated by the measuring device for measuring at least one property of at least one bead, and

vii) treating at least one bead of a plurality of beads based on the result of the analysis performed in step vi).

55 (Currently Amended). A method for treating at least one bead of a plurality of beads, ~~such as polymer beads,~~ said method comprising the steps of

i) providing a plurality of beads each comprising at least one label

ii) providing an apparatus for treating at least one bead according to claim 31,

iii) contacting at least one bead of the plurality of beads
provided in step i) with the vacuum container capture body of
the apparatus provided in step ii),
iv) rotating the capture body to transfer at least one bead
from the loading section of the vacuum container to the
measuring section of the vacuum container,
v) using the measuring device of the apparatus for measuring
at least one property of at least one bead, and
vi) using the analysing device for analysing data generated by
the measuring device for measuring at least one property of at
least one bead,
vii) identifying at least one bead of a plurality of beads by
analysing the data generated by the measuring device for
measuring at least one property of at least one bead, and
viii) treating at least one bead of a plurality of beads based
on the identification obtained in step vii).

56 (Currently Amended). A method for treating at least one
bead of a plurality of beads, ~~such as polymer beads,~~ said
method comprising the steps of
i) providing a plurality of beads each comprising at least one
label,
ii) providing an apparatus for treating at least one bead
according to claim 31,
iii) contacting at least one bead of the plurality of beads
provided in step i) with the vacuum container capture body of
the apparatus provided in step ii),
iv) rotating the capture body to transfer at least one bead
from the loading section of the vacuum container to the
measuring section of the vacuum container,
v) using the measuring device of the apparatus for measuring
at least one property of at least one bead,

vi) analysing data generated by the measuring device for
measuring at least one property of at least one bead,
vii) sorting the at least one bead of a plurality of beads
based on the result of the analysis performed in step vi), and
viii) treating the at least one bead of a plurality of beads
having been sorted in step vii).

57 (Currently Amended). A method for treating at least one
bead of a plurality of beads, ~~such as polymer beads,~~ said
method comprising the steps of
i) providing a plurality of beads each comprising at least one
label,
ii) providing an apparatus for treating at least one bead
according to claim 31,
iii) contacting at least one bead of the plurality of beads
provided in step i) with the vacuum container capture body of
the apparatus provided in step ii),
iv) rotating the capture body to transfer at least one bead
from the loading section of the vacuum container to the
measuring section of the vacuum container,
v) using the measuring device of the apparatus for measuring
at least one property of at least one bead, and
vi) using the analysing device for analysing data generated by
the measuring device for measuring at least one property of at
least one bead,
vii) identifying at least one bead of a plurality of beads by
analysing the data generated by the measuring device for
measuring at least one property of at least one bead,
viii) sorting the at least one bead of a plurality of beads
based on the identification performed in step vii), and
ix) treating the at least one bead of a plurality of beads
having been sorted in step viii).

58 (Previously Presented). The method of claim 49, wherein the measuring of at least one property of at least one optically detectable bead located in the measuring section of the apparatus comprises the steps of
i) activating a source of illumination,
ii) capturing at least one image of the at least one optically detectable bead, and
iii) optionally storing the at least one image of the at least one optically detectable bead.

59-151 (Canceled).

152 (New).  The apparatus according to claim 1, wherein the optically detectable beads are polymer beads.

153 (New).  The apparatus according to claim 8, wherein the device for rotating the vacuum container is a stepper motor.

154 (New).  The apparatus according to claim 3 wherein the support is circular.